

Rhode Island Data Brief

Drinking & Other High School Health Risks (2011)

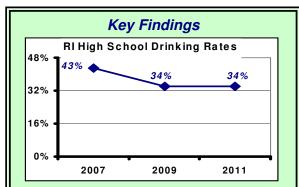
One in three RI high school students (34%) drinks alcohol. This Brief examines if these students are in greater jeopardy from other health risks than their non-drinking peers (Chart 1), and whether those risks have improved or worsened over time (Chart 2). Twenty measures are evaluated, comprising seven areas of vulnerability (drugs, injury, mental health, sex, tobacco, violence, and weight). The findings are intended to inform interested parties and stimulate further research.

In this Brief, the relationship between drinking and other risk factors is one of association, not causation (e.g., drinkers are twice as likely to have unprotected sex, but drinking does not cause a student to forego birth control). In the text, only those differences in values (over time or between drinking and nondrinking students) that are statistically 'significant' at the 95% confidence level are noted.3 Lastly, with the exception of the 'lesbian, gay, or bisexual' measure, all others are unfavorable indicators, so lower/declining values are preferred.

Drugs: Students who drink are five times more likely to use marijuana (55% vs. 11%) and five times more likely to abuse legal (prescription and 'over-the-counter') drugs (32% vs. 6%).

Injury: Drinkers are more likely to not wear bike helmets (89% vs. 71%) or seat belts (16% vs. 5%). Drinking and driving is also more common among this group (18% vs. 0%).

Long-term emotional disability is more prevalent among drinkers (18% vs. 13%), and they are much more likely to suffer from depression (34% vs. 19%). High schoolers who drink are two and a half times more likely to attempt suicide (13% vs. 5%).



RI high school drinking rates decreased from 43% to 34% (2007 to 2011).

Alcohol drinking is strongly associated with other higher health risks4 (drinkers had higher rates on 17 (of 19) measures).

From 2007-2011, no measure for students who drink improved (or worsened) significantly.

Sex: Drinkers are twice as likely to identify as lesbian, gay or bisexual (10% vs. 5%). They are also two and a half times more likely to be sexually active (49% vs. 19%) and three times more likely to have unprotected sex (9% vs. 3%).

Tobacco: Cigarette smoking is six times more common among students who drink (26% vs. 4%), and heavy smoking (more than 10 cigarettes a day) is much more prevalent (3% vs. 0%). The use of any tobacco product (cigarettes, cigars, smokeless tobacco) is five and a half times higher for these students (39% vs. 7%).

Violence: Physical fighting is two times more common among students who drink (34% vs. 16%), and these students are three and a half times more likely to experience dating violence (14% vs. 4%). In addition, the incidence of rape is almost three times higher for this group (11% vs. 4%).

Weight: Drinking and non-drinking students do not have significant differences in their rates of obesity, inadequate exercise or poor nutrition.

Student drinking is strongly correlated with other higher health risks.⁴ One in three RI high schoolers drinks alcohol, and is at greater threat from almost every factor examined. Not only is high school drinking illegal, it is also a health hazard.

Students self-reported drinking alcohol one or more times in the past month.

Data are from RI's Youth Risk Behavior Survey, part of a biennial national survey of public high school students on the major causes of disease and injury morbidity and mortality. For more information contact Bruce Cryan, 401-222-5111, www.health.ri.gov/data/youthriskbehaviorsurvey.

As the RI-YRBS is a sample survey, if the 95% confidence intervals of two values do not overlap, one may conclude (with 95% certainty) there was a 'real' difference between the two values (i.e., the difference was not likely due to sampling bias).

The Phi Coefficient (r₀) measuring the correlation of drinking and other health risks is 0.853 ('0' is no correlation and '1' is perfect correlation).

Chart 1: RI 2011 High School Health Risks by Drinking Status * statistically significant differences 11% * Use Marijuana 55% 6% * Abused Legal Drugs 32% 71% * No Bike Helmet 5% * No Seat Belt 16% * Drinking & Driving 18% 13% * Emotional Disability 18% 19% □ non-Drinkers * Felt 'Depressed' 34% Drinkers * Attempted Suicide 13% * Lesbian, Gay or 5% **Bisexual** 19% * Sexually Active * Unprotected Sex 4% * Smoke Cigarettes 26%

* Heavy Smoking

* Use Any Tobacco

* Physical Fighting

* Dating Violence

Inadequate Exercise

* Rape Victim

Poor Nutrition

Obesity

3%

16%

14%

11%

11%

11%

12%

25%

10%

3%

0%

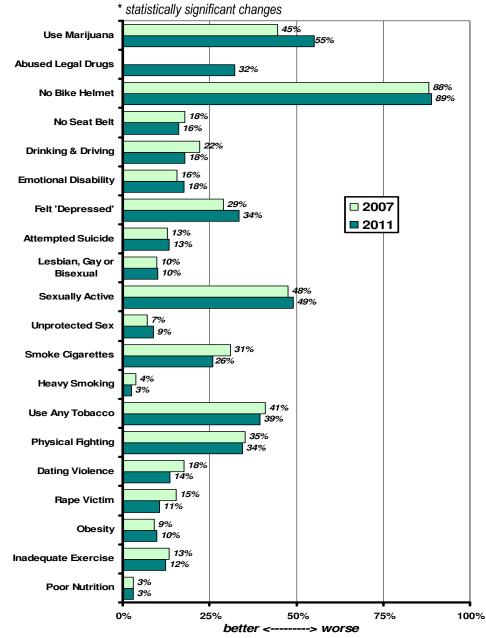
34%

50%

better <----> worse

75%

Chart 2: 2007 & 2011 RI Health Risks for Students who Drink



DRUG MEASURES: Use Marijuana (1+ times, past mo.); Abused Legal Drugs (abused prescription and/or 'over-the-counter' drugs 1+ times, ever); INJURY MEASURES: No Bike Helmet (never or rarely wore, past yr.); No Seat Belt (never or rarely wore, past yr.); Drinking & Driving (1+ times, past mo.); MENTAL HEALTH MEASURES: Emotional Disability (for 6+ mos.); Felt 'Depressed' (for 2+ weeks, past yr.); Attempted Suicide (1+ times, past yr.); SEX MEASURES: Lesbian, Gay or Bisexual (sexual self-identity); Sexually Active (1+ partner, past 3 mos.); Unprotected Sex (no protection, last encounter); TOBACCO MEASURES: Smoke Cigarettes (on 1+ days, past mo.); Heavy Smoking (over 10 cigarettes per day, past mo.); Use Any Tobacco (used chewing tobacco, snuff, dip, or smoked cigars or cigarettes on 1+ days, past mo.); VIOLENCE MEASURES: Physical Fighting (1+ times, past yr.); Dating Violence (physically abused by partner in the past yr.); Rape Victim (forced into sexual intercourse, ever); WEIGHT MEASURES: Obesity (over the 95th percentile for body mass index); Inadequate Exercise (60+ min. of exercise on 0 days, past wk.); Poor Nutrition (no fruit or vegetables, past wk.)

100%